No. 17-965

In the Supreme Court of the United States

Donald J. Trump, the **U.S. Department of Homeland Security**, **Kirstjen M. Nielsen**, the **U.S. Department of State**, **Rex W. Tillerson**, and the **United States of America**,

Petitioners,

v.

the **State of Hawaii**, **Ismail Elshikh**, **John Doe 1**, **John Doe 2**, and the **Muslim Association of Hawaii, Inc.**,

Respondents.

On Writ of Certiorari to the United States Courts of Appeals for the Ninth Circuit

BRIEF FOR THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES AND OTHERS AS *AMICI CURIAE* SUPPORTING RESPONDENTS

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INTEREST OF *AMICI CURIAE*[1]

Over the next several decades, the percentage of older Americans will increase, with patients needing care for a variety of chronic health conditions such as heart disease, cancer, emphysema, stroke, diabetes, and Alzheimer's disease.[2] The risk of a pandemic is also growing, given that infectious diseases can spread around the globe in a matter of days due to increased urbanization and international travel. These conditions pose a threat to America's health security—the nation's preparedness and resilience in the face of incidents with health consequences.[3] To

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[1] All parties have consented to the filing of *amici*'s brief. *See* S. Ct. R. 37.3(a). No counsel for a party authored this brief in whole or in part; no such counsel or party made a monetary contribution intended to fund the preparation or submission of this brief; and no person other than *amici*, their members, or their counsel made such a monetary contribution. *See id.* R. 37.6.

[2] Office of Disease Prevention & Health Promotion, U.S. Dep't of Health & Human Servs., *Older Adults* (last visited Mar. 23, 2018), https://www.healthypeople.gov/2020/topics-objectives/topic/older-adults.

[3] The U.S. Department of Health and Human Services defines "national health security" as "a state in which the nation and its people are prepared for, protected from, and resilient in the face of incidents with health consequences. The threats and risks that communities face are diverse—they can be intentional or naturally occurring and can result from both persistent and emerging threats, including severe weather, infectious diseases, hazardous material exposures, and terrorist attacks." Nicole Lurie, U.S. Dep't of Health & Human Servs., National Health Security Strategy and Implementation Plan: 2015–2018, at 1 (n.d.), https://www.phe.gov/Preparedness/planning/authority/nhss/Documents/nhss-ip.pdf.

address these health-security imperatives, America's health-professional workforce relies on highly qualified individuals from other countries to help care for patients, conduct biomedical research, and address public-health threats.

The Association of American Medical Colleges represents all 151 accredited U.S. medical schools, nearly 400 major teaching hospitals and health systems (including 51 U.S. Department of Veterans Affairs medical centers), and more than 80 academic societies. The AAMC is joined in this brief by the **Academic Pediatric Association**, the **Alliance for Academic Internal Medicine**, the **American Academy of Family Physicians**, the **American Academy of Pediatrics**, the **American Association of Colleges of Nursing**, the **American Association of Colleges of Pharmacy**, the **American College of Healthcare Executives**, the **American College of Obstetricians and Gynecologists**, the **American College of Physicians**, the **American Dental Education Association**, the **American Medical Association**, the **American Nurses Association**, the **American Pediatric Society**, the **American Psychiatric Association**, the **American Public Health Association**, the **American Society of Hematology**, the **American Thoracic Society**, the **Association of Academic Health Centers**, the **Association of Medical School Pediatric Department Chairs**, the **Association of Schools and Programs of Public Health**, the **Association of Schools of Allied Health Professions**, the **Association of University Programs in Health Administration**, the **Endocrine Society**, the **Greater New York Hospital Association**,

the **Hawaii Medical Association**, **Hispanic-Serving Health Professions Schools, Inc.**, the **Infectious Diseases Society of America**, the **National Hispanic Medical Association**, the **National Medical Association**, the **National Resident Matching Program**, the **Physician Assistant Education Association**, the **Renal Physicians Association**, the **Society for Pediatric Research**, and the **Society of General Internal Medicine**. Additional information regarding *amici* is provided in this brief's Addendum.

Representing the nation's health professionals and biomedical researchers, *amici* share an interest in avoiding destabilizing changes in immigration laws and policies that make the United States less attractive to highly qualified professionals from other countries. The indefinite nationality-based exclusions announced in Proclamation No. 9645[4] represent such changes and, therefore, present a serious risk to the country's health security. The lower courts appropriately enjoined the Proclamation, and *amici* respectfully urge affirmance of those injunctions, including their nationwide applicability.

SUMMARY OF THE ARGUMENT

The United States healthcare workforce relies upon health professionals and scientists from other countries to provide high-quality and accessible patient care. Accordingly, a fair and efficient immigra-

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[4] 82 Fed. Reg. 45,161 (Sept. 27, 2017) (Pet. App. 121a).

tion system strengthens the American healthcare system and advances the nation's health security.[5]

Health professionals and scientists who choose to come to the United States care for patients, advance the discovery of treatments, and improve the overall quality of healthcare. They fill gaps in the nation's health-professional workforce, including at VA hospitals and in rural and other underserved communities. In addition, global collaboration among scientists and other biomedical researchers contributes to breakthroughs that benefit the United States and its citizens.

To address shortages in the U.S. healthcare workforce, Congress has established programs to attract physicians and other health professionals from other countries. Entering professionals must demonstrate advanced and specialized educational achievement and satisfy rigorous licensing and credentialing requirements set by multiple federal, state, and professional bodies. Proclamation No. 9645 and its nationality-based criteria interfere with this carefully calibrated system.

The Proclamation represents the third, recent attempt to engraft nationality-based restrictions onto the nation's immigration system. The first attempt, Executive Order No. 13,769,[6] was enjoined before it

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[5] *Amici* use the term "immigration system" to refer to the laws and policies governing foreign-born individuals who wish to live permanently or work or study temporarily in the United States.

[6] 82 Fed. Reg. 8977 (Feb. 1, 2017).

could be enforced.[7] The second attempt, Executive Order No. 13,780,[8] was similarly enjoined.[9] When the government sought leave to implement the executive order pending certiorari review, this Court limited the scope of those injunctions, ruling that the suspension-of-entry provisions "may not be enforced against foreign nationals who have a credible claim of a bona fide relationship with a person or entity in the United States."[10] The challenged provisions of Executive Order No. 13,780 expired before this Court completed its review, and the Court dismissed the challenges as moot.[11]

The Proclamation revives the nationality-based provisions of the previous executive orders. It bans all immigration from five of the countries covered by them (Iran, Libya, Syria, Yemen, and Somalia) and two additional countries (Chad and North Korea).[12]

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[7] *E.g.*, *Washington v. Trump*, Case No. C17-0141JLR, 2017 WL 462040, at *1–3 (W.D. Wash. Feb. 3, 2017).

[8] 82 Fed. Reg. 13,209 (Mar. 9, 2017) (Pet. App. 148a), *amended*, Memorandum on the Effective Date in Executive Order 13780, 2017 Daily Comp. Pres. Doc. 401 (June 14, 2017).

[9] *Hawai'i v Trump*, 245 F. Supp. 3d 1227, 1234–39 (D. Haw.), *aff'd in part and vacated in part*, 859 F.3d 741 (9th Cir. 2017); *Int'l Refugee Assistance Project v. Trump*, 241 F. Supp. 3d 539, 549–66 (D. Md.), *aff'd in part and vacated in part en banc*, 857 F.3d 554 (4th Cir. 2017).

[10] *Trump v. Int'l Refugee Assistance Project*, 137 S. Ct. 2080, 2088 (2017).

[11] *Trump v. Hawaii*, 138 S. Ct. 377, 377 (2017); *Trump v. Int'l Refugee Assistance Project*, 138 S. Ct. 353, 353 (2017).

[12] Proclamation No. 9645 § 2(a)–(e), (g)–(h), 82 Fed. Reg. at 45,165–67 (Pet. App. 131a–137a).

The Proclamation also restricts significantly the visas available to nationals of many of the covered nations.[13] Although the Proclamation initially recognizes the Court's protection of foreign nationals with a bona fide relationship with the United States, that protection vanished on October 18, 2017.[14] Regardless of the form, the Proclamation sends the same inhospitable signal to non-U.S. health professionals that the executive orders sent.[15]

The district court in this case enjoined enforcement of most of the Proclamation's entry-ban provisions, finding them to be impermissible nationality-based restrictions.[16] The Ninth Circuit turned back the government's attempt to stay the district court's injunction with respect to individuals with a bona fide relationship with the United States, mirroring this Court's equitable assessment in *IRAP*.[17] In the midst of the Ninth Circuit's review, this Court granted the government's motion to stay enforcement of the district-court injunction, allowing the Proclamation to be enforced in full.[18]

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[13] *Id.* § 2(a)–(e), (g), 82 Fed. Reg. at 45,165–67 (Pet. App. 131a–137a).

[14] *Id.* § 7(a), (b), 82 Fed. Reg. at 45,171 (Pet. App. 146a–147a).

[15] *Amici* use "non-U.S." to refer to individuals born outside the United States.

[16] *Hawaii v. Trump*, 265 F. Supp. 3d 1140, 1154–60 (D. Haw. 2017) (Pet. App. 92a–104a).

[17] *Hawaii v. Trump*, 878 F.3d 662, 683–702 (9th Cir. 2017) (Pet. App. 24a–64a).

[18] *Trump v. Hawaii*, 138 S. Ct. 542, 542 (2017).

Proclamation No. 9645 threatens to (1) exacerbate the nation's health-professional workforce shortages, (2) jeopardize progress in medical innovation, and (3) inhibit global research and public-health collaboration. These consequences will, in the judgment of *amici*, undermine the health security of the United States. *Amici* believe the Ninth Circuit acted correctly, and *amici* urge the Court to affirm.

ARGUMENT

I. The United States Needs Non-U.S. Health Professionals To Meet the Health Needs of Americans.

A. The United States Is Experiencing Health-Professional Shortages.

By 2050, adults over the age of 65 will make up 20% of the U.S. population, up from 12% in 2000.[19] Almost half of the U.S. population is expected to have at least one chronic disease by 2020.[20] Demand for healthcare services is projected to be among the fastest growing occupational groups in the next decade.[21] At the same time, the United States faces a growing

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[19] Wan He et al., U.S. Census Bureau, An Aging World: 2015, at 139 (Mar. 2016), https://www.census.gov/content/dam/Census/library/publications/2016/demo/p95-16-1.pdf.

[20] *Id.* at 8.

[21] Bureau of Labor Statistics, U.S. Dep't of Labor, Employment Projections—2016–2026, at 4 (Jan. 30, 2018), https://www.bls.gov/news.release/pdf/ecopro.pdf (citing aging baby-boom population, longer life expectancies, and growing rates of chronic conditions, BLS projects a 15.3% increase in demand for healthcare practitioners and technical occupations).

shortage of health professionals.[22] The AAMC estimates that the United States faces a current shortage of between 29,500 and 37,800 physicians.[23] That gap will grow over time, as more than one-third of all currently active physicians will be 65 or older within the next decade.[24] The AAMC projects a shortfall of between 42,600 and 121,300 physicians by 2030.[25] Shortages will be experienced in other health professions as well. The Henry J. Kaiser Family Foundation estimates a nationwide shortage of almost 3,400

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[22] Charlotte Oslund, *Which Industries Need Workers? Exploring Differences in Labor Market Activity*, Monthly Lab. Rev., Jan. 2016, at 5–6, https://www.bls.gov/opub/mlr/2016/article/pdf/which-industries-need-workers-exploring-differences-in-labor-market-activity.pdf; Ctr. for Health Workforce Studies, SUNY-Albany Sch. of Pub Health, Health Care Employment Projections, 2014–2024: An Analysis of Bureau of Labor Statistics Projections by Setting and by Occupation 50 (Apr. 2016), http://www.chwsny.org/wp-content/uploads/2016/04/BLS-Health-Care-Employment-Projections_2016.pdf (projects 439,300 more registered nurses, and more than 400,000 physicians, nurse practitioners, physician assistants, and nurse midwives).

[23] IHS Markit, The Complexities of Physician Supply and Demand Projections from 2015 to 2030 (forthcoming Apr. 2018) (manuscript at 44) (on file with AAMC). To address this physician shortage, U.S. medical schools have increased enrollment by 30%, and several new schools have opened. Approximately 95% of U.S. medical-school graduates train in residency positions. Still, the AAMC projects physician shortages in all specialties.

[24] *Id.* (manuscript at viii).

[25] *Id.* (manuscript at vi).

mental-health professionals and more than 8,100 dental-health professionals.[26]

These shortages are nationwide. Texas, for example, has more than 1,200 health-professional shortage areas, or "HPSAs."[27] The shortages also span multiple types of health professionals. Over the next decade, thirty-seven states will have a shortage of primary-care physicians, seven states will face a shortage of nurses, and there will be shortages in the following specialties: cardiologists, gastroenterologists, hematologists, oncologists, and pulmonologists.[28] Nationwide, HRSA has identified more

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[26] Henry J. Kaiser Fam. Found., *Mental Health Care Health Professional Shortage Areas (HPSAs)* (last visited Mar. 23, 2018), http://kff.org/other/state-indicator/mental-health-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D; Henry J. Kaiser Fam. Found., *Dental Care Health Professional Shortage Areas (HPSAs)* (last visited Mar. 23, 2018), http://www.kff.org/other/state-indicator/dental-care-health-professional-shortage-areas-hpsas/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D.

[27] Health Res. & Servs. Admin., U.S. Dep't of Health & Human Servs., *Health Professional Shortage Areas (HPSAs)* (last updated Oct. 2016), https://bhw.hrsa.gov/shortage-designation/hpsas; Health Res. & Servs. Admin., U.S. Dep't of Health & Human Servs., *Shortage Areas* (last updated Jan. 1, 2018), https://datawarehouse.hrsa.gov/topics/shortageAreas.aspx.

[28] Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., State-Level Projections of Supply and Demand for Primary Care Practitioners: 2013–2025, at 5 (Nov. 2016), https://bhw.hrsa.gov/sites/default/files/bhw/health-workforce-analysis/research/projections/primary-care-state-

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than 5,000 areas in the United States with a shortage of mental-health professionals,[29] which means less than half of this nation's need for mental-health treatment is being met.[30]

Shortages in health professionals pose a threat to our nation's health security. HHS's current National Health Security Strategy and Implementation Plan calls for a workforce "large enough to meet both routine and surge demands" but finds that "the public health, healthcare, and emergency management workforces are all currently operating under significant constraints, with gaps in coverage in many communities."[31]

"Medically underserved communities,"[32] many of which are in rural areas, will suffer the consequences

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projections2013-2025.pdf; Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., Supply and Demand Projections of the Nursing Workforce: 2014–2030, at 9–10 (July 21, 2017), https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/NCHWA_HRSA_Nursing_Report.pdf (identifying nursing shortages in Alaska, California, Georgia, New Jersey, South Carolina, South Dakota, and Texas); Nat'l Ctr. for Health Workforce Analysis, U.S. Dep't of Health & Human Servs., National and Regional Projections of Supply and Demand for Internal Medicine Subspecialty Practitioners: 2013–2025, at 4 (Dec. 2016), https://bhw.hrsa.gov/sites/default/files/bhw/health-workforce-analysis/research/projections/internal-medicine-subspecialty-report.pdf.

[29] HRSA, *Shortage Areas*, *supra* note 27.

[30] Kaiser Found., *Mental Health Care HPSAs*, *supra* note 26.

[31] Lurie, *supra* note 3, at 26–27.

[32] Health Res. & Servs. Admin., *Medically Underserved Area/Population (MUA/P) Application Process* (last updated

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of the health-professional shortage most severely. Those communities are already experiencing a shortage,[33] and restricting or discouraging the entry of non-U.S. healthcare professionals will make it even harder for patients to receive the care they need.

B. Non-U.S. Professionals Comprise a Significant Part of the Nation's Healthcare Workforce, Especially in Underserved Areas.

Physicians from outside the United States provide critically needed care to patients throughout the nation, and especially in communities where access to healthcare is problematic. As of 2010, more than one in four physicians practicing in the United States was born in another country.[34] Individuals from other countries also comprise a significant number of other healthcare professionals.[35]

Oct. 2016), https://bhw.hrsa.gov/shortage-designation/muap-process.

[33] *See, e.g.*, Darrell G. Kirch & Kate Petelle, Viewpoint, *Addressing the Physician Shortage: The Peril of Ignoring Demography*, 317 JAMA 1947, 1947 (2017).

[34] Kristen McCabe, *Foreign-Born Health Care Workers in the United States*, Migration Info. Source (June 27, 2012), http://www.migrationpolicy.org/article/foreign-born-health-care-workers-united-states; *see also* Anthony P. Carnevale et al., Geo. Univ. Ctr. on Educ. & the Workforce, Healthcare 102 (June 2012), https://cew.georgetown.edu/wp-content/uploads/2014/11/Healthcare.FullReport.090712.pdf (as of 2010, 27.56% of physicians and surgeons were foreign born).

[35] Carnevale et al., *supra* note 34, at 102 (reporting that, as of 2010, 21.36% of dentists, 20.44% of pharmacists, 15.18% of

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Physicians from outside the United States disproportionately practice primary-care disciplines serving millions of patients each year, including many Medicare and Medicaid beneficiaries.[36] Health professionals from other countries are critical to meeting the health-care needs of rural and other underserved communities, Native American communities, and VA hospitals.[37] In Alabama, for example, "Syria ranks fourth as a source of doctors for medically-needy areas . . . behind India, Pakistan and the Philippines."[38] And while the Proclamation directly impacts profes-

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registered nurses, and 13.74% of physician assistants were foreign born).

[36] Marcia D. Hohn et al., Immigrants in Health Care: Keeping Americans Healthy Through Care and Innovation 2 (June 2016), http://immigrationresearch-info.org/system/files/health_care_report_FINAL_20160607.pdf; Padmini D. Ranasinghe, *International Medical Graduates in the U.S. Physician Workforce*, 115 J. Am. Osteopathic Ass'n 236, 238 (2015).

[37] *See* Ranasinghe, *supra* note 36, at 238 (reporting that "a higher proportion of [international medical graduates] than other graduates serve socioeconomically disadvantaged populations across the United States" and that they "tend to fill the gaps in workforce demands in rural areas"); Katrina Armstrong et al., Perspective, *International Exchange and American Medicine*, 376 New Eng. J. Med. e40(1), e40(2) (2017); Akash Goel, *What Americans Will Lose When They Push Immigrants Away*, Time (Apr. 13, 2017, 12:45 pm), http://time.com/4733567/immigration-doctors-rust-belt/.

[38] Amy Yurkanin, *In Alabama, Doctors from Countries on Trump's Banned List Fill Medical Gaps*, AL.com (Feb. 4, 2017, 7:02 am), http://www.al.com/news/index.ssf/2017/02/in_alabama_doctors_from_countr.html.

sionals from countries such as Syria and Iran, it could also discourage interest among highly qualified health professionals around the globe, which could harm American patients living in communities already facing workforce shortages in health care.[39]

II. Congress Has Created Pathways for Highly Qualified Health Professionals from Other Countries To Address Gaps in the U.S. Healthcare Workforce.

Congress has enacted laws designed to attract physicians from other countries to meet the healthcare needs of U.S. citizens. Balancing U.S. and international interests, it has also created legal exceptions to otherwise applicable limits on the eligibility of medical-resident physicians to remain in the United States, provided that the professionals practice in underserved communities. These laws and related waivers—many of which are longstanding—have added thousands of physicians in places that have had difficulties attracting trained medical professionals.

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[39] *See* Aaron Carroll, *Immigration Reform's Potential Effects on US Health Care*, JAMA Forum (Mar. 8, 2017), https://newsatjama.jama.com/2017/03/08/jama-forum-immigration-reforms-potential-effects-on-us-health-care/.

A. The Conrad 30 Waiver Program and Other Congressionally Sanctioned Programs Deploy Non-U.S. Health Professionals to Medically Underserved Communities.

Rural and other medically underserved communities have difficulty recruiting and retaining physicians. By necessity, they rely on non-U.S. physicians, including many who complete residency training in U.S. teaching hospitals while on a J-1 visa.[40] Congress has made this possible through the longstanding Conrad 30 waiver program, which enjoys broad bipartisan support.[41]

The majority of physicians from other countries who complete their medical residencies[42] in the Unit-

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[40] *Rural J-1 Visa Waiver*, Rural Health Info. Hub (last updated Feb. 24, 2017), https://www.ruralhealthinfo.org/topics/j-1-visa-waiver; *see also* Fred D. Baldwin, *Access to Care: Overcoming the Rural Physician Shortage*, Appalachian Reg'l Comm'n (last visited Mar. 23, 2018), https://www.arc.gov/magazine/articles.asp?ARTICLE_ID=98; Anh Gray, *Visa Program Enables Foreign Doctors To Work in Underserved Communities*, KUNR (Feb. 7, 2018), http://kunr.org/post/visa-program-enables-foreign-doctors-work-underserved-communities#stream/0 (describes use of Conrad 30 J-1 Visa waiver program to recruit an obstetrics-and-gynecology doctor to address physician shortage in Nevada).

[41] Indeed, the most recent reauthorization of the Conrad 30 waiver program (that was not included within an appropriations measure) passed on unanimous consent in the Senate, 158 Cong. Rec. S6007 (daily ed. Aug. 2, 2012), and a 412–3 vote in the House, *id.* at H5972 (daily ed. Sept. 13, 2012).

[42] Medical residencies are a "vital component of American medical education," *McKeesport Hosp. v. Accreditation Council*

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ed States do so as "exchange visitors" under a J-1 visa.[43] The Department of State has designated the Educational Commission for Foreign Medical Graduates as the visa sponsor program for all J-1 exchange-visitor physicians who participate in clinical-training programs in the United States. Any graduate from a medical school in a country other than the United States or Canada must achieve certification through the ECFMG prior to admission to a clinical-training program in the United States. Certification involves verification of identity and graduation from a recognized medical school, successful performance on the same professional-knowledge and skills examinations that must be passed by U.S. medical-school graduates, and screening against the U.S. Department of Treasury Office of Foreign Assets Control Specially Designated Nationals List.[44]

In 2016, nearly 7,000 resident physicians held a J-1 visa.[45] Ordinarily, J-1 visa holders must return to

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for Graduate Med. Educ., 24 F.3d 519, 525 (3d Cir. 1994), that provide new physicians "a supervised transition between the pure academics of medical school and the realities of practice," *Doe v. Mercy Catholic Med. Ctr.*, 850 F.3d 545, 549 (3d Cir. 2017).

[43] *See* Sarah E. Brotherton & Sylvia I. Etzel, *Graduate Medical Education, 2016–2017*, 318 JAMA 2368, 2379 (2017).

[44] John R. Boulet et al., *The International Medical Graduate Pipeline: Recent Trends in Certification and Residency Training*, 25 Health Aff. 469, 473–74 (2006); Educ. Comm'n for Foreign Med. Graduates, ECFMG Fact Sheet for Consular Officials 1–2 (Mar. 30, 2017), http://www.ecfmg.org/annc/fact-sheet-consular-officials.pdf.

[45] Brotherton & Etzel, *supra* note 43, at 2379.

their home countries for at least two years before they can seek certain nonimmigrant visas or permanent-resident status in the United States.[46] The Conrad 30 program, however, allows state health departments to recommend waiver of this requirement for up to 30 physicians per state per year if the physicians agree to be employed full-time for at least three years serving patients in medically underserved communities.[47]

More than 15,000 physicians have participated in the Conrad 30 program since it was first authorized in 1994.[48] For example, in the past ten years, Iowa has sponsored 292 Conrad 30 participants, utilizing 97% of the state's program allotment.[49] Iowa's high usage of the Conrad 30 program illustrates the importance of the program to directing medical profes-

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[46] *See* Immigration and Nationality Act § 212(e), 8 U.S.C. § 1182(e) (2012).

[47] *See* Immigration and Nationality Act § 214(*l*), 8 U.S.C. § 1184(*l*) (2012); U.S. Citizenship & Immigration Servs., U.S. Dep't of Homeland Sec., *Conrad 30 Waiver Program* (last updated May 5, 2014), https://www.uscis.gov/working-united-states/students-and-exchange-visitors/conrad-30-waiver-program.

[48] *Conrad 30 Reauthorization Bill Earns Bipartisan Support*, Am. Med. Ass'n (May 18, 2017), https://wire.ama-assn.org/ama-news/conrad-30-reauthorization-bill-earns-bipartisan-support.

[49] Devan Patel, *Foreign Doctors Assist with Iowa's Physician Shortage*, Globe Gazette (Macon City, Iowa), Mar. 19, 2017, at C1. Iowa has over 300 HPSAs. HRSA, *Shortage Areas*, *supra* note 27.

sionals to rural areas and other communities that have a significant need for them.

Although the Conrad 30 waiver program is decentralized, many of the program's oversight and approval responsibilities remain with the federal government.[60] For example, the U.S. Department of State Waiver Review Division must recommend each Conrad 30 waiver forwarded by a state health department before the waiver may be considered by the U.S. Citizenship and Immigration Services. In turn, USCIS has exclusive jurisdiction to approve or deny each such waiver. USCIS is also the sole agency responsible for approving petitions for H-1B status, a precondition for employment authorization to fulfill the three-year-service commitment under the Conrad 30 waiver program.[61]

Physicians from other countries may also obtain a waiver of the J-1 visa two-year-return requirement by serving in a program providing care to underserved communities under the purview of federal agencies including the Appalachian Regional Commission, the Delta Regional Authority, and the Departments of Health and Human Services, Defense,

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[60] Davis G. Patterson et al., *Conrad 30 Waivers for Physicians on J-1 Visas: State Policies, Practices, and Perspectives* 2 (WWAMI Rural Health Ctr. Final Rep. No. 157, Mar. 2016), http://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/03/RHRC_FR157_Patterson.pdf.

[61] Educ. Comm'n for Foreign Med. Graduates, *About ECMFG* (last updated Feb. 23, 2018), http://www.ecfmg.org/about/.

and Veterans Affairs.[52] Since the start of the program, the Appalachian Regional Commission has placed more than 1,000 physicians in more than 200 Appalachian communities.[53] And the Department of Defense uses the J-1 waiver process to ensure an adequate number of physicians and scientists "in compelling cases to retain persons of unique and outstanding qualifications whose services are urgently required for programs of significant official interest."[54]

Some physicians from other countries continue to serve beyond the required three years in a medically underserved area, often in connection with the Physician National Interest Waiver Program. This program provides a path for physicians to obtain lawful-permanent-resident status. Under the program, a physician agrees to work full-time for five years in an area designated by HHS as having a physician shortage or at a healthcare facility under the juris-

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[52] 22 C.F.R. § 41.63(c) (2017); Bureau of Consular Affairs, U.S. Dep't of State, *Waiver of the Exchange Visitor Two-Year Home-Country Physical Presence Requirement* (last visited Mar. 23, 2018), https://travel.state.gov/content/travel/en/us-visas/study/exchange/waiver-of-the-exchange-visitor.html; Karen M. Pollins & Kristen A. Harris, Immigration Issues Impacting the Training, Recruitment, and Employment of Foreign Physicians by Academic Medical Centers 7 (Jan. 2015), http://harrisvisalaw.com/AHLA.AMC.Member.Briefing.pdf.

[53] Baldwin, *supra* note 40.

[54] Office of the Under Sec'y of Def. for Acquisition, Tech. & Logistics, U.S. Dep't of Defense, *Department of Defense Responsibility of Review of Waiver Requests* (last visited Mar. 23, 2018), http://www.acq.osd.mil/ecs/review-request.html.

diction of the Secretary of the Veterans Administration. This increases patient access to care by retaining physicians from other countries in medically underserved U.S. communities and in VA hospitals.[55]

The Proclamation will likely exclude physicians from providing care in high-need communities as part of these carefully designed programs authorized by Congress and implemented by a multitude of federal and state agencies charged with meeting the health needs of Americans.

B. Congress Has Established Additional Programs To Attract Non-U.S. Specialists and Others with Extraordinary Abilities.

Physicians from other countries are also eligible for USCIS-issued H-1B visas for specialty occupations under the sponsorship of a U.S. employer. Such physicians are subject to significant vetting. To provide direct patient-care services, physicians must have a medical license issued by the states in which they will practice medicine. Eligibility for a license, in turn, requires passing all steps of the United States Medical Licensing Examination, rigorous screening and formal certification by the ECFMG, and successful completion of the required number of years in an accredited U.S. graduate-medical-

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[55] U.S. Citizenship & Immigration Servs., U.S. Dep't of Homeland Sec., *Green Card Through a Physician National Interest Waiver (NIW)* (last updated Feb. 17, 2016), https://www.uscis.gov/green-card/other-ways-get-green-card/green-card-through-physician-national-interest-waiver-niw.

education program.[56] In general, a physician from another country may obtain H-1B status for up to six years.[57] Between October 2015 and September 2016, the federal government approved H-1B certifications for more than 14,000 health professionals, including nearly 8,000 physicians and surgeons.[58] In addition, physicians and other health professionals from other countries may submit an immigrant petition on the basis of extraordinary ability reflected by national or international acclaim, immigration in the national interest, or recognition as an outstanding professor or researcher with an offer of tenure or a tenure-

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[56] Educ. Comm'n for Foreign Med. Graduates, *Certification* (last updated Sept. 7, 2016), http://www.ecfmg.org/certification/index.html; Am. Med. Ass'n, *Residency Program Requirements for International Medical Graduates* (last visited Mar. 23, 2018), https://www.ama-assn.org/life-career/residency-program-requirements-international-medical-graduates; William W. Pinsky, Ideas and Opinions, *The Importance of International Medical Graduates in the United States*, 166 Annals Internal Med. 840, 840 (2017).

[57] Immigration and Nationality Act § 212(n)(1)(E)–(n)(1)(G), (n)(3), 8 U.S.C. § 1182(n)(1)(E)–(n)(1)(G), (n)(3); 20 C.F.R. §§ 655.736–.739 (2017).

[58] U.S. Citizenship & Immigration Servs., U.S. Dep't of Homeland Sec., Characteristics of H-1B Specialty Occupation Workers: Fiscal Year 2016 Annual Report to Congress 12, 14 (May 5, 2017), https://www.uscis.gov/sites/default/files/USCIS/Resources/Reports%20and%20Studies/H-1B/h-1B-FY16.pdf; *see also* Michael Ollove, *Changes to Visa Program Put Foreign-Born Doctors in Limbo*, PBS NewsHour: The Rundown (May 23, 2017, 3:46 pm), http://www.pbs.org/newshour/rundown/changes-visa-program-put-foreign-born-doctors-limbo/ (reporting that University of Arkansas for Medical Sciences "had 86 slots for H-1B visa holders in 2016" and "used the visa program to recruit pioneering researchers from around the world").

track position at a U.S. institution of higher education.[59]

The Proclamation's presumptive barring of physicians and other highly skilled scientists and health professionals solely on the basis of nationality will likely have an adverse impact on the ability of teaching hospitals and research universities to recruit and retain needed members of their health-professional and scientist workforces.

III. Beyond Caring for Patients in Underserved Communities, Non-U.S. Professionals Play Important Roles in the American Healthcare System.

Health professionals from other countries make other significant contributions to the nation's healthcare system. They facilitate America's participation in the global enterprise of research, making important discoveries, developing solutions to health problems, and devising new treatments for patients. They enhance the nation's ability to respond to large-scale public-health threats, including infectious diseases, bioterrorism, and mass casualties. And they increase the diversity of the professionals who treat patients, thereby improving the ability of the overall healthcare workforce to care for an increasingly diverse patient population.

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[59] U.S. Citizenship & Immigration Servs., U.S. Dep't of Homeland Sec., *Employment-Based Immigration: First Preference EB-1* (last updated Oct. 29, 2015), https://www.uscis.gov/working-united-states/permanent-workers/employment-based-immigration-first-preference-eb-1.

A. Collaboration Between American Health Professionals and Non-U.S. Professionals Maximizes Research Efforts.

Diseases do not respect national borders and, therefore, effective responses must be global. "Collaborative international efforts, especially strengthening the capacity of national health systems, are essential to prevent and prepare for an array of threats, from infectious disease pandemics to the silent killers of chronic noncommunicable diseases."[60] The government's pandemic-influenza plan highlights the need for "rapid exchange of information, data, reagents and other resources needed domestically and globally, to prepare for and respond to an influenza pandemic outbreak."[61]

The American healthcare community includes many individuals from outside the United States who contribute daily to the effort to cure diseases and combat potential pandemics, such as the acquired immunodeficiency and severe acute respiratory syndromes and the Ebola and Zika viruses. Any constraint on the participation of recognized experts in the free exchange of scientific research and collaboration impairs the collective knowledge of the

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[60] Comm. on Global Health and the Future of the U.S., Nat'l Acads. of Scis., Eng'g & Med., *Global Health and the Future Role of the United States*, at ix (2017).

[61] U.S. Dep't of Health & Human Servs., Pandemic Influenza Plan: 2017 Update 6 (n.d.), https://www.cdc.gov/flu/pandemic-resources/pdf/pan-flu-report-2017v2.pdf.

healthcare community and jeopardizes American lives.[62]

Medical research in the United States benefits greatly from the contributions of non-U.S. professionals. A recent study found that more than 40% of the cancer researchers at America's top cancer institutes are immigrants.[63] At the University of Texas MD Anderson Cancer Center, 62% of researchers were born in another country.[64] The federal government has recognized the value of working with global partners and provided financial support to U.S.-based institutions engaged in international healthcare-research collaboration. The National Institutes of Health awarded grants in 2016 to Duke, Tulane, Vanderbilt, and Yale to "partner with West African academic centers to design training programs for their scientists and health researchers" who study "Ebola, Lassa fe-

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[62] *See* M. Ihsan Kaadan, *I'm a Syrian Doctor Who Treated Patients in Aleppo. I'm in the US To Give Back*, STAT (Feb. 6, 2017), https://www.statnews.com/2017/02/06/syria-aleppo-doctor-us/ (describing Syrian doctor's development of "novel ways to respond to the Zika epidemic"); *see also* Crystal Maynard, *Experts Delve into Issue of Wound Infections After Blast Injuries*, U.S. Army (Dec. 7, 2016), https://www.army.mil/article/179290/experts_delve_into_issue_of_wound_infections_after_blast_injuries (discussing program that gathers international expertise in battlefield injuries and infections and develops health solutions).

[63] Stuart Anderson, Nat'l Found. for Am. Policy, The Contributions of Immigrants to Cancer Research in America 1 (Feb. 2013), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2226420.

[64] *Id.*

ver, yellow fever and other emerging viral diseases."[65] Although these grants fund work by American professionals abroad, they complement programs hosting non-U.S. professionals here,[66] and they demonstrate the importance of the cross-border exchange of ideas in healthcare.[67] The government has similarly

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[65] *Ebola-Affected Countries Receive NIH Support to Strengthen Research Capacity*, Nat'l Insts. of Health (Oct. 26, 2016), https://www.nih.gov/news-events/news-releases/ebola-affected-countries-receive-nih-support-strengthen-research-capacity; *see also Joint West Africa Research Group To Foster Biopreparedness Collaborative Initiative To Focus on Expanding Research Capabilities in Region*, U.S. Army Med. Res. & Materiel Command (last updated July 20, 2016), http://mrmc.amedd.army.mil/index.cfm?pageid=media_resources.articles.biopreparedness_collaborative_initiative_in_west_africa ("The West African Ebola outbreak in 2014–15 highlighted gaps in global public health response and a lack of countermeasures [and required] invest[ment] in a strategic initiative to leverage existing research platforms and relationships to improve biopreparedness in the region.").

[66] *E.g.*, Lisa Morris, *Engineers, Scientists Participate in International Exchange Program*, U.S. Army (Oct. 22, 2014), https://www.army.mil/article/136728 ("Currently, seven foreign engineers and scientists work at the USAMRMC through the [Engineer and Scientist Exchange Program] and one U.S. scientist works abroad.").

[67] *See, e.g.*, U.S. Agency for Int'l Dev., *Emerging Pandemic Threats Program: EPT-2* (last updated Nov. 25, 2014), https://www.usaid.gov/ept2 (recognizing the importance of global networks to prevent and control pandemic threats); Christopher R. Braden et al., *Progress in Global Surveillance and Response Capacity 10 Years After Severe Acute Respiratory Syndrome*, 19 Emerging Infectious Diseases 864, 867 (2013) ("Perhaps the most important legacy of SARS is the recognition of the critical need for a multilateral response, led by [the World

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invested one billion dollars in the Global Health Security Agenda, a thirty-one-nation "partnership . . . designed to measurably address global vulnerability to . . . public health threats, strengthen systems, and ensure that a trained workforce has the tools needed to prevent, detect, and respond rapidly and effectively to infectious disease threats."[68]

International collaboration among health professionals provides opportunities to share medical knowledge and cross-train the clinical skills necessary to address global medical challenges. The Proclamation's impact on other nations' abilities to collaborate with the United States will likely make such collaboration less robust, slowing advances in medical treatment that would benefit patients in the United States and impairing the ability to halt newly emerging infectious diseases at their sources.

B. Inclusion of Non-U.S. Professionals in the American Healthcare Community Increases America's Health Security.

The integration of health professionals from outside the United States into the nation's healthcare network improves more than global health security. It strengthens America's domestic health security,

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Health Organization], in the event of a rapidly moving but ultimately containable global epidemic.").

[68] Global Health Security Agenda, Advancing the Global Health Security Agenda: Progress and Early Impact from U.S. Investment 1, 2 (n.d.), https://www.ghsagenda.org/docs/default-source/default-document-library/ghsa-legacy-report.pdf?sfvrsn=12.

advancing the express purpose of the Proclamation to protect Americans.

Shortly after the terrorist attacks on September 11, 2001, and the subsequent anthrax attacks, the government recognized the threat infectious disease presents to our national security.[69] This and other health-security threats persist, as illustrated recently in the rapid spread of the virulent Ebola virus.[70]

Teaching hospitals represent a case study in how our health-security infrastructure relies on the contributions of health professions from other countries. These hospitals combine three missions—patient care, education, and medical research. The nation relies on them to train the next generation of physicians, dentists, nurses, and other health professionals. Although they represent only 5% of all hospitals, teaching hospitals provide 95% of the nation's comprehensive cancer centers, 71% of all Level I trauma centers, 69% of all burn-care-unit-center beds, 60% of pediatric intensive-care-unit beds, and 33% of all charity care.[71] They are often on the front lines when

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[69] Gary Cecchine & Melinda Moore, *Infectious Disease and National Security: Strategic Information Needs* 22–23 (2006).

[70] Lena H. Sun, *Ebola Fight Remains a Priority for Obama*, Wash. Post, Dec. 3, 2014, at A3.

[71] Assoc. of Am. Med. Colls., *Why Teaching Hospitals Are Important to All Americans* (Aug. 24, 2017), https://news.aamc.org/for-the-media/article/teaching-hospitals-important-americans/; Assoc. of Am. Med. Colls., *Teaching Hospitals: Bringing Together Patient Care, Research, and Education* (Mar. 14, 2017), https://news.aamc.org/for-the-media/article/teaching-hospitals/. Level I trauma centers are

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America experiences terrorist attacks and large-scale health threats, as evidenced by the roles they played in the response to the 2013 Boston Marathon bombing,[72] the treatment of Ebola in teaching hospitals in Nebraska and Atlanta,[73] participation in the Global Virus Network's Zika Task Force,[74] responding to Hurricanes Harvey, Irma, and Maria,[75] and as recently as the Las Vegas mass shooting.[76]

"central to the trauma system" and "capable of providing total care for every aspect of injury—from prevention through rehabilitation." Am. Trauma Soc'y, *Trauma Center Levels Explained* (last visited Mar. 23, 2018), http://www.amtrauma.org/?page=traumalevels.

[72] *See, e.g.*, Atul Gawande, *Why Boston's Hospitals Were Ready*, New Yorker (Apr. 17, 2013), http://www.newyorker.com/news/news-desk/why-bostons-hospitals-were-ready.

[73] *See* Michael J. Connor, Jr., et al., *Successful Delivery of RRT in Ebola Virus Disease*, 26 J. Am. Soc'y Nephrology 31, 31 (2015) (describing treatment of Ebola patient in Atlanta); Scott Neuman, *Why Ebola Patients Are Getting Treatment in Nebraska*, NPR (Oct. 6, 2014, 12:40 pm), http://www.npr.org/sections/thetwo-way/2014/10/06/354083214/why-ebola-patients-aregetting-treatment-in-nebraska (reporting on government-commissioned biocontainment facility at a teaching hospital in Nebraska).

[74] Global Virus Network, Zika Task Force Members 1–19 (n.d.), http://gvn.org/wp-content/uploads/2016/02/GVN-ZTF-Bios-060917.pdf.

[75] Ricardo Nuila, *Treating Patients at Houston's Largest Emergency Shelter, as Hurricane Harvey Rages*, New Yorker (Aug. 29, 2017), https://www.newyorker.com/news/news-desk/treating-patients-at-houstons-largest-emergency-shelter-as-hurricane-harvey-rages; Pam Wright, *At Tampa Hospital in Evacuation Zone, 800 Patients and Staff Ride Out Hurricane Irma*, Weather Co. (Sept. 10, 2017, 3:15 pm), https://

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Teaching hospitals rely on the diverse training and skills of health professionals from other countries, with significant numbers of individuals in J-1 or H-1B status.[77] The effective participation of non-U.S. health professionals in the care provided by the nation's teaching hospitals requires fair and predictable immigration processes. This reliance is illustrated by the "Match"—the annual process assigning residents and fellows seeking slots in U.S. graduate-medical-education training programs. The 2017 Match had more than 43,000 applicants for graduate-medical-education training programs, including more than 10,000 non-U.S. citizens.[78]

According to Congress, the Match is "an integral part of an educational system that has produced the finest physicians and medical researchers in the

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weather.com/storms/hurricane/news/hurricane-irma-tampa-hospital-evacuation-zone.

[76] Alyssa Rege, *2 Medical Residents Treat Las Vegas Shooting Victims 3 Days After Certification*, Becker's Hosp. Rev. (Oct. 10, 2017), https://www.beckershospitalreview.com/hospital-physician-relationships/2-medical-residents-treat-las-vegas-shooting-victims-3-days-after-certification.html.

[77] Dhruv Khullar et al., Ideas and Opinions, *U.S. Immigration Policy and American Medical Research: The Scientific Contributions of Foreign Medical Graduates*, 167 Annals Internal Med. 584, 584 (2017) (foreign medical graduates comprise 18.3% of U.S. academic physicians).

[78] Nat'l Resident Matching Prog., Results and Data: 2017 Main Residency Match 1 (Apr. 2017), http://www.nrmp.org/wp-content/uploads/2017/04/Main-Match-Results-and-Data-2017.pdf.

world."[79] Congress also acknowledged the country's teaching hospitals and medical schools' "crucial missions of patient care, physician training, and medical research."[80]

In 2017, medical-school graduates from countries other than the United States and Canada matched to more than 2,000 of the internal-medicine residencies in the United States.[81] Graduates from other countries matched to 337 first-year family-medicine-residency positions and 253 first-year pediatrics-residency positions, providing much needed care in the types of specialties where physician shortages are growing.[82]

Once matched, medical residents comprise roughly 12% of all active physicians in the United States.[83] Of the 124,000 residents and fellows who trained in graduate-medical-education programs in 2016, more than 19,000 were neither U.S. citizens nor lawful permanent residents.[84] In each year from 2012 through 2016, 7% to 8% of resident physicians held

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[79] 15 U.S.C. § 37b(a)(1)(A) (2012).

[80] *Id.* § 37b(a)(1)(E).

[81] Nat'l Resident Matching Prog., *supra* note 78, at 8.

[82] *Id.* at 7.

[83] Brotherton & Etzel, *supra* note 43, at 2379; Assoc. of Am. Med. Colls., *2016 Physician Specialty Data Report: Number of People per Active Physician by Specialty, 2015* (last visited Mar. 23, 2018), https://www.aamc.org/data/workforce/reports/458490/1-2-chart.html.

[84] *See* Brotherton & Etzel, *supra* note 43, at 2379.

temporary visas.[85] This demonstrates that, despite the recent opening of several new medical schools, there are insufficient graduates of U.S. medical schools to meet the needs of communities served by U.S. medical-residency programs and the nation's overall healthcare workforce. Professionals from other countries fill these gaps serving as physician trainees in accredited programs.

Medical residents, who include a significant percentage of non-U.S. physicians, are essential to the delivery by the VA of healthcare to our nation's veterans. During the 2016–2017 academic year, more than 43,000 medical residents, including those holding temporary visas, completed some or all of their clinical training in VA hospitals and other medical centers.[86]

The Proclamation's nationality-based exclusions pose a substantial risk to the ability of teaching hospitals, including veterans' medical centers, to meet

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[85] *Id.* J-1 or J-2 exchange-visitor visas were held by 6,996 residents; 2,869 residents held H-1, H-1B, H-2, or H-3 temporary-worker visas; 426 residents held F-1 student visas; and approximately 37 residents held B-1 or B-2 temporary-visitor visas. *Id.*; *see also* Sarah E. Brotherton & Sylvia I. Etzel, *Graduate Medical Education, 2015–2016*, 316 JAMA 2291, 2302 (2016); Sarah E. Brotherton & Sylvia I. Etzel, *Graduate Medical Education, 2014–2015*, 314 JAMA 2436, 2446 (2015); Sarah E. Brotherton & Sylvia I. Etzel, *Graduate Medical Education, 2013–2014*, 312 JAMA 2427, 2437 (2014); Sarah E. Brotherton & Sylvia I. Etzel, *Graduate Medical Education, 2012–2013*, 310 JAMA 2328, 2338 (2013).

[86] Office of Academic Affiliations, U.S. Dep't of Vets. Affairs, *Medical and Dental Education Program* (last visited Mar. 23, 2018), https://www.va.gov/oaa/gme_default.asp.

the demand for highly advanced and trauma-related care.

C. Non-U.S. Professionals Make Vital Contributions to Healthcare and Biomedical Research in the United States.

It is widely recognized in scientific fields that travel and global collaboration are essential incubators of research and innovation. Congress has specifically recognized the importance of international collaboration in fields such as biomedical research.[87]

Foreign medical graduates, who account for nearly a fifth of biomedical research scholarship in the United States, advance innovation in care and discovery in biomedical research, for the benefit of Americans.[88] A physician from another country selected for a residency at a U.S. teaching hospital will often have already completed a residency, with an ability to share surgical techniques or other skills from day one. Health professionals from other countries can share their understanding of social and cultural factors in a particular patient subpopulation, improving their colleagues' interpersonal and communication skills, professional competencies that are

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[87] *E.g.*, 21st Century Cures Act, Pub. L. No. 114-255, § 2072, 130 Stat. 1033, 1083 (2016) (encouraging the creation of "a global pediatric clinical study network by providing grants, contracts, or cooperative agreements to support new and early stage investigators who participate in the global pediatric clinical study network").

[88] Khullar, *supra* note 77, at 584.

required of every physician training in the United States.[89]

Scientists recruited to join a research project will generally have distinguished themselves in the area of study, informing and accelerating efforts to discover therapies and cures. The benefits to the United States of scholarly innovators from other countries are well-documented. In 2016, all six American winners of the Nobel Prize in economics and scientific fields were immigrants. Moreover, since 2000, immigrants have been awarded almost 40%—or 31 of 78—of the Nobel Prizes won by Americans in chemistry, medicine, and physics.[90] An analysis of the U.S. Patent and Trademark Office's online database shows that 76% of patents awarded to the top ten patent-producing U.S. universities in 2011 listed at least one

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[89] *See, e.g.*, Heena P. Santry & Sherry M. Wren, *The Role of Unconscious Bias in Surgical Safety and Outcomes*, 92 Surgical Clinics North Am. 137, 143 (2012) ("Cultural competence is considered an expected skill of modern physicians and has been described as a requirement for physicians who wish to deliver high-quality care to all patients."). The Accreditation Council for Graduate Medical Education, the accrediting body for graduate-medical-education programs in the United States, includes interpersonal and communication skills among the six core competencies used to assess resident and fellow development. Dinchen Jardine et al., Milestones Guidebook for Residents and Fellows 4–5 (June 2017), https://www.acgme.org/Portals/0/PDFs/Milestones/MilestonesGuidebookforResidentsFellows.pdf.

[90] Stuart Anderson, *Immigrants Flooding America with Nobel Prizes*, Forbes (Oct. 16, 2016, 10:48 am), https://www.forbes.com/sites/stuartanderson/2016/10/16/immigrants-flooding-america-with-nobel-prizes/#57237ef06cb6.

inventor who had been born in another country.[91] During that same period, 56% of all patents were awarded to inventors who were students, postdoctoral fellows, or staff researchers from another country.[92]

The Proclamation could detract from the ability of the United States to lead the world in cutting-edge biomedical research, technological innovation, and scientific discovery.

IV. Ill-Considered Changes to the Nation's Immigration System Threaten America's Health Security.

Proclamation No. 9645 threatens to disrupt the carefully balanced immigration processes essential to the nation's healthcare and biomedical research. In *amici*'s judgment, indefinite, nationality-based exclusions of highly skilled health professionals and scientists will ultimately put the nation's health security at risk.

The harm begins with the Proclamation itself, which includes the blanket exclusion of immigrants and nonimmigrants from Syria, and disqualifies health professionals from Iran from obtaining H-1B visas. The University of Damascus in Syria ranked seventh among all international medical schools with graduates holding active licenses to practice medi-

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[91] P'ship for a New Am. Econ., Patent Pending: How Immigrants Are Reinventing the American Economy 1 (June 2012), http://www.newamericaneconomy.org/wp-content/uploads/2013/07/patent-pending.pdf.

[92] *Id.*

cine in the United States.[93] Economists estimate that of physicians working in the United States in 2015, 3,899 received training in Syria and 3,043 received training in Iran.[94] Based on the national average of patients seen, physicians from those two countries collectively provide more than 14 million patient visits each year in the United States.[95] The absence of even one physician can have a significant adverse impact on patients.[96]

The Proclamation's exclusions also create a risk to the integrity of the Match. According to the AAMC, there were 22.7% fewer physicians from Iran, Libya, Somalia, Syria, and Yemen who reported needing a

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[93] Aaron Young et al., *A Census of Actively Licensed Physicians in the United States, 2016*, 103 J. Med. Reg., no. 2, 2017, at 7, 12.

[94] Org. for Econ. Co-operation & Dev., Health Workforce Migration: Foreign-Trained Doctors by Country of Origin (last visited Mar. 23, 2018), http://stats.oecd.org/index.aspx?queryid=68336.

[95] *Id.*; Esther Hing & Susan M. Schappert, *Generalist and Specialty Physicians: Supply and Access, 2009–2010*, at 2 (NCHS Data Brief No. 105, Sept. 2012), https://www.cdc.gov/nchs/data/databriefs/db105.pdf (estimating that generalists and specialists average, respectfully, 3,521 and 2,704 patient visits annually).

[96] *See, e.g.*, Derek Bagley, *Crossing Borders: The Impact of the Travel Ban*, Endocrine News, Sept. 2017, at 30, 30–31 (interviewing pediatric endocrinologist trained at the University of Damascus medical school who participated in the Conrad 30 program and whose practice in North Dakota includes 400 children).

visa in advance of the 2018 Match.[97] The National Resident Matching Program reported that the overall number of foreign medical graduates participating in the 2018 Match declined for the second year in a row.[98] Uncertainty about the entry of physicians from other countries may adversely affect the 2019 Match and subsequent iterations if graduate-medical-education programs decline to select highly qualified candidates from the affected countries.

Barriers to entry, including protracted and backlogged clearance processes, will interfere with the ability of medical-residency programs to select the applicants deemed best qualified and will disrupt the staffing of training programs. This harms both the hospitals and the patients they serve by reducing the number of qualified physicians available to provide necessary care to patients throughout the United States. Further, a reduction in the number of qualified medical-school graduates who participate in medical-residency programs will exacerbate the nation's already growing physician-workforce shortage—a shortage felt most acutely in rural and urban underserved communities.[99]

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[97] *See* Assoc. of Am. Med. Colls., *Match Day Celebrations Highlight Physician Workforce Needs* (Mar. 16, 2018), https://news.aamc.org/press-releases/article/match_day_03162018/.

[98] *See* Nat'l Resident Matching Prog., Advance Data Tables: 2018 Main Residency Match 6 (Mar. 16, 2018), http://www.nrmp.org/wp-content/uploads/2018/03/Advance-Data-Tables-2018.pdf.

[99] William W. Pinsky, *The Impact of Immigration Developments on U.S. Residency Recruitment and Health Care:*

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Immigration processes that lack predictability and transparency will disrupt the orderly transition at thousands of teaching hospitals that typically occurs on or about July 1 as graduating residents finish their training programs and new residents begin theirs. If visa-related processing delays prevent a physician from reporting on July 1, even if the delays are short term, the adverse effect on patients will be immediate and potentially irreparable, beginning with strains on coverage in critical-care, surgical, and outpatient settings. Covering for a physician whose entry to the United States is in limbo will put unreasonable demands on colleagues in the form of extended duty hours and additional "on call" periods, creating risks associated with quality and safety.

Disruptions in the immigration system could also result in longer waits for veterans seeking healthcare, given the fact that many international health professionals provide care at VA health facilities.

Ill-considered changes to immigration processes also threaten the effectiveness of the Conrad 30 waiver program and other congressionally authorized pathways for health professionals that rely on timely decisions on petitions for initial approval or changes in immigration status.[100]

A Perspective from the Educational Commission for Foreign Medical Graduates (ECFMG), AHME News, Fall 2017, at 3–4.

[100] *See* William W. Pinsky et al., The Role of International Medical Graduates in the U.S. Health Care System: Past, Present and Future (Mar. 3, 2018) (presentation slides on file

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As an example, the Proclamation presumptively bars physicians from Iran and Syria from obtaining the work visa required to participate in the Conrad 30 program and similar programs designed to recruit highly skilled health professionals supported by a range of institutions, including the Appalachian Regional Commission, the Delta Regional Authority, and the Veterans Administration.

Proclamation No. 9645 also has the potential to constrain medical research and innovation.[101] In the

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with AAMC) (reporting that 36% of foreign physicians who were placed in the 2017 Match experienced immigration-related delays and a 25% decline in academic year 2017–2018 in J-1 applications from Syria, Iran, Sudan, Libya, Yemen, and Somalia); *see also* Yegeneh Torbati, *Trump Administration Red Tape Tangles Up Visas for Skilled Foreigners, Data Shows*, Reuters (Sept. 20, 2017, 1:12 am), https://www.reuters.com/article/us-usa-immigration-employment-insight/trump-administration-red-tape-tangles-up-visas-for-skilled-foreigners-data-shows-idUSKCN1BV0G8 ("Partners HealthCare is a healthcare system that includes Massachusetts General Hospital and Brigham and Women's Hospital, two prestigious teaching hospitals for Harvard Medical School. It has received more than 50 [requests for evidence] from USCIS so far this year, compared to fewer than 15 all of last year in response to a similar number of H-1B petitions."); U.S. Citizenship & Immigration Servs., U.S. Dep't of Homeland Sec., Number of H-1B Petition Filings 2 (n.d.), https://www.uscis.gov/sites/default/files/USCIS/Resources/Reports%20and%20Studies/Immigration%20Forms%20Data/BAHA/h-1b-2007-2017-trend-tables.pdf (IS, Number of H-1B Petition Filings FY2007-FY2017 (reporting ten-year lows for H-1B petitions in both medicine-and-health and life-sciences occupation categories).

[101] *See* Susan Sauer Sloan & Tom Arrison, Nat'l Acad. of Sci., Nat'l Acad. of Med. & Inst. of Med. of the Nat'l Acads., (footnote continues on following page)

wake of the Proclamation, and its predecessor executive orders, engineering schools have reported a sharp decline in the number of applications from international students, suggesting heightened fears among such students about the impact of the executive orders.[102] International graduate applications and first-time graduate enrollment of Indian students at U.S. institutions declined by 15% and 13%, respectively, from autumn 2016 to autumn 2017, while applications of graduate students from the Middle East and North Africa declined 17% during the same period.[103] Because non-U.S. postdoctorate students are increasingly relied upon to counter a decrease in U.S. students pursuing biomedical re-

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Examining Core Elements of International Research Collaboration: Summary of a Workshop 1 (2011) (noting that "[t]he globalization of science, engineering, and medical research is proceeding rapidly" as governments recognize that "research and development . . . leads to economic growth, employment, and overall social well-being of their citizens").

[102] Jeffrey Mervis, *Drop in Foreign Applicants Worries Engineering Schools*, 355 Sci. 676, 676 (2017); *see also* Stephanie Saul, *Fewer Foreign Students Enroll in U.S. Colleges*, N.Y. Times, Nov. 13, 2017, at A15 ("The number of newly arriving international students declined an average 7 percent in fall 2017, with 45 percent of campuses reporting drops in new international enrollment . . . .").

[103] Hironao Okahana & Enyu Zhou, International Graduate Applications and Enrollment: Fall 2017, at 6–7 (Jan. 2018), http://cgsnet.org/ckfinder/userfiles/files/Intl_Survey_Report_Fall2017.pdf.

search in this nation, chilling their participation could adversely affect U.S. biomedical research.[104]

The Proclamation inhibits the exchange of medical and scientific research findings. For example, the probability that some non-U.S. physicians currently working inside the United States will not be able to return if they travel to a conference abroad could have a chilling effect on this type of essential collaboration.[105]

In the absence of transparent criteria and timely decision making, *amici* believe there is a risk that highly qualified health professionals from other countries will choose to go elsewhere, to the detriment of the United States.[106] The environment creat-

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[104] Howard H. Garrison et al., *Biomedical Science Postdocs: An End to the Era of Expansion*, 30 FASEB J. 41, 41, 43 (2016); Barbara Howard, *Iranian Doctor Arrives in Boston To Do Research After 8-Month Travel Ban*, WGBH (Oct. 5, 2017), https://news.wgbh.org/2017/10/05/local-news/iranian-doctor-arrives-boston-do-research-after-8-month-travel-ban-delay.

[105] See Elizabeth Redden, *A Year of Travel Bans*, Inside Higher Ed (Feb. 1, 2018), https://www.insidehighered.com/news/2018/02/01/year-later-trump-administrations-travel-restrictions-opposed-many-higher-ed-are (visa data suggest decreases in the number of individuals from countries affected by the Proclamation coming to the United States for academic conferences).

[106] Lisa Rapaport, *US Immigration Restrictions May Slow Medical Research*, Reuters (Sept. 25, 2017, 5:16 pm), https://www.reuters.com/article/us-health-immigration-physicians/us-immigration-restrictions-may-slow-medical-research-idUSKCN1C02XE (quoting study author Anupam Jena: "I would expect fewer clinical trials to be conducted, fewer research papers to be written, and the overall pace of innovation to decline."); Pinsky, *supra* note 56, at 840

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ed by the Proclamation presents real uncertainty for *amici*, for their members, and, most importantly, for patients. [107] Facing an unpredictable immigration landscape, some health professionals have already

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("[C]hanges in immigration policy might limit bilateral knowledge transfer between the United States and other countries. From a global education perspective, these restrictions also might diminish the perceived benefit of U.S.-based GME and encourage highly educated medical school graduates to seek postgraduate opportunities elsewhere.").

[107] Rebecca Trager, *Science Community Still Wary as Trump's Travel Ban Partially Reinstated*, Chem. World (June 29, 2017), https://www.chemistryworld.com/news/science-community-still-wary-as-trumps-travel-ban-partially-reinstated/3007643.article (quoting government-relations director for the American Association for the Advancement of Science's concerns about the bona-fide-relationship standard and the continuing impression that the United States is "unfriendly" to non-U.S. professionals); Sara Reardon, *Court Revives US Travel Ban*, 546 Nature 584, 584–85 (2017) ("[M]any researchers worry that uncertainty over US immigration policy, and perceptions that the country is unwelcoming, may have already driven away some international students and scientists."); Letter from Acoustical Society of America et al. to Donald J. Trump 1 (Oct. 17, 2017), https://www.ashrae.org/File%20Library/About/Government%20Affairs/Public%20Policy%20Resources/Multisociety-Immigration-Letter-September-2017.pdf (stating position of 86 organizations representing scientific, engineering-education societies, national associations, and universities: "There is growing concern among international students from many nations—including those that are not named in the administration's current restrictions—that recent U.S. policy could be expanded further to include other nations. International students no longer view the United States as a welcoming country.").

abandoned their efforts to enter the United States.[108] These trends concern *amici* greatly.

CONCLUSION

Amici have a long history of leading a diverse and highly skilled workforce of U.S. and non-U.S. health professionals to treat hundreds of millions of patients annually and to conduct groundbreaking research leading to medical breakthroughs. Health professionals and scientific experts from other countries are rigorously screened, must satisfy strict qualification and licensing standards, and are addressing compelling needs in our communities.

Amici believe that their work to ensure the nation's health security—through critically needed patient care and cutting-edge biomedical research—contributes to America's national security. In doing so, *amici* rely upon immigration processes to operate fairly and efficiently.

Amici see first-hand the terrible human toll caused by terrorists. They provide trauma care in the immediate aftermath and ongoing treatment and therapy to those who survive such violence, and they support the need to protect the United States from those who would do the nation harm. However, *amici*

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[108] *See, e.g.*, Jennifer McDermott, *Syrian Doctor Caught in Travel Ban Gives Up, Moves to Canada*, Bos. Globe (June 28, 2017), https://www.bostonglobe.com/news/politics/2017/06/28/syrian-doctor-caught-travel-ban-gives-moves-canada/QqkVo4RNsnAdjyhQspNcpI/story.html ("Khaled Almilaji said Wednesday there's too much uncertainty, even though he possibly could get a student visa under the scaled-back version of the ban.").

are deeply concerned that Proclamation No. 9645, and similar actions barring or discouraging health professionals and scientists from coming to the United States, will reduce patient access to care, inhibit medical innovation and biomedical research, and set back efforts to prevent pandemics and other public-health threats to Americans.

For the reasons provided above, as well as those presented by Respondents, *amici* urge the Court to affirm the decision of the Ninth Circuit and maintain the injunction against Proclamation No. 9645.

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Respectfully submitted,

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ADDENDUM

AMICI CURIAE

Association of American Medical Colleges—represents all 151 accredited U.S. medical schools; nearly 400 major teaching hospitals and health systems, including 51 U.S. Department of Veterans Affairs medical centers; and more than 80 academic societies.

Academic Pediatric Association—a professional medical organization for academic pediatricians specializing in primary-care research and healthcare services.

Alliance for Academic Internal Medicine—empowers academic internal-medicine professionals and enhances healthcare through professional development, research, and advocacy. The Alliance includes more than 10,000 faculty and staff in departments of internal medicine at medical schools and teaching hospitals.

American Academy of Family Physicians—represents 129,000 family physicians, family-medicine residents, and medical students from all fifty states, the District of Columbia, Guam, Puerto Rico, the Virgin Islands, and the Uniformed Services of the United States.

American Academy of Pediatrics—a not-for-profit professional organization of 66,000 primary-care pediatricians, pediatric-medical subspecialists, and pediatric-surgical specialists dedicated to the attainment of optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults.

American Association of Colleges of Nursing—represents 810 member schools offering baccalaureate and graduate programs in nursing at public and private universities nationwide.

American Association of Colleges of Pharmacy—represents pharmacy education in the United States, advancing pharmacy education, research, scholarship, practice, and service to improve societal health.

American College of Healthcare Executives—an international professional society of 40,000 healthcare executives who lead hospitals, healthcare systems, and other healthcare organizations.

American College of Obstetricians and Gynecologists—a not-for-profit educational and professional organization with more than 58,000 members dedicated to the healthcare of women.

American College of Physicians—represents 152,000 internal-medicine physicians (internists), related subspecialists, and medical students.

American Dental Education Association—the "Voice of Dental Education," with members that include all 66 U.S. dental schools, over 1,000 allied and advanced dental-education programs, 66 corporations, and more than 20,000 individuals.

American Medical Association—the largest professional association of physicians, residents, and medical students in the United States. The AMA appears on its own behalf and as a representative of the Litigation Center of the American Medical Association and the State Medical Societies.

American Nurses Association—represents the interests of 3.6 million registered nurses, has more than 179,000 members through both state associations and individual membership, and has 38 national organizational affiliates.

American Pediatric Society—a pediatric academic society comprised of well-established child-health researchers who are recognized leaders in child health.

American Psychiatric Association—represents more than 37,800 members involved in psychiatric practice, research, and academia representing the diversity of the patients for whom they care. As the leading psychiatric organization in the world, APA now encompasses members practicing in more than 100 countries.

American Public Health Association—champions the health of all people and all communities, strengthens the profession of public health, shares the latest research and information, promotes best practices, and advocates for public-health issues and policies grounded in research.

American Society of Hematology—the world's largest professional society of hematologists, including clinicians and researchers, who are dedicated to furthering the understanding, diagnosis, treatment, and prevention of disorders affecting the blood.

American Thoracic Society—a medical and scientific membership organization of over 16,000 members who work to prevent, detect, treat, and cure respiratory, sleep, and critical-care-related illnesses through research, clinical care, and advocacy.

Association of Academic Health Centers—a not-for-profit association dedicated to advancing the nation's health and well-being through the vigorous leadership of academic health centers.

Association of Medical School Pediatric Department Chairs—represents the department chairs of departments of pediatrics at leading academic medical centers.

Association of Schools and Programs of Public Health—represents more than 100 schools and programs accredited by the Council on Education for Public Health.

Association of Schools of Allied Health Professions—a national association comprised of 116 not-for-profit universities focused on issues impacting allied-health education.

Association of University Programs in Health Administration—a global network of colleges, universities, faculty, individuals, and organizations dedicated to the improvement of health and healthcare delivery through excellence in healthcare management and policy education and scholarship, by promoting the value of university-based management education for leadership roles in the health sector.

Endocrine Society—the world's oldest and largest organization of scientists devoted to hormone research and physicians who care for people with hormone-related conditions, with more than 18,000 members, including scientists, physicians, educators, nurses, and students in 122 countries.

Greater New York Hospital Association—represents more than 160 hospitals and health systems located throughout New York, New Jersey, Connecticut, Pennsylvania, and Rhode Island. All of GNYHA's members are either not-for-profit entities, charitable organizations, or publicly sponsored institutions that provide services that range from state-of-the-art, acute tertiary services to basic primary care, and, with their related medical schools, provide medical education and training and undertake cutting-edge medical research.

Hawaii Medical Association—the largest professional association of physicians, residents, and medical students in Hawaii. The HMA appears on its own behalf and as a representative of the Litigation Center of the American Medical Association and the State Medical Societies.

Hispanic-Serving Health Professions Schools, Inc.—represents more than 30 schools of medicine, public health, nursing, pharmacy, and dentistry that strive to strengthen the nation's capacity to increase the Hispanic health workforce and advance the health of Hispanics.

Infectious Diseases Society of America—represents physicians, scientists, and other healthcare professionals who specialize in infectious diseases to improve the health of individuals, communities, and society by promoting excellence in patient care, education, research, public health, and prevention.

National Hispanic Medical Association—represents the interests and concerns of 50,000 licensed physicians committed to the mission to im-

prove the health of Hispanic populations with affiliated Hispanic medical societies, resident and medical-student organizations, and other public and private partners.

National Medical Association—founded in 1895, NMA is the oldest and largest organization representing and promoting the interests of 30,000 physicians, primarily of African descent, and the multiethnic patients they serve.

National Resident Matching Program—a private, not-for-profit organization established in 1952 to provide an orderly and fair mechanism for matching the preferences of applicants for U.S. residency positions with the preferences of residency-program directors.

Physician Assistant Education Association—represents over 200 physician-assistant programs across the nation.

Renal Physicians Association—a national medical-specialty society representing more than 3,500 members serving kidney patients nationwide.

Society for Pediatric Research—a membership organization for pediatric researchers focused on creating a network of multidisciplinary researchers to improve child health.

Society of General Internal Medicine—represents more than 3,000 of the world's leading academic general internists, who are dedicated to improving access to care for vulnerable populations, eliminating healthcare disparities, and enhancing medical education.